

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (previously presented) A method of analyzing a web of material containing at least two anomalies, comprising:

imaging at least a portion of the web to provide digital information;

processing the digital information with an initial algorithm to identify regions on the web containing the at least two anomalies;

placing fiducial marks on the web, wherein the fiducial marks uniquely identify a position on the web;

winding the web onto a roll;

recording positional information localizing the identified regions relative to the fiducial marks; and

subsequent to the winding step, unwinding the web and applying locating marks to the web identifying the position of at least one of the identified regions, using the positional information and the fiducial marks as a guide.

2. (currently amended) The method according to claim 1, further comprising:

storing or buffering the digital information describing the identified regions;

receiving input defining the constituents of an anomaly that is a defect with respect to the contemplated end use of the web;

processing the digital information describing the identified regions to identify at least one identified region that qualifies as an actual defect with respect to the contemplated end use of the web, and to identify at least one identified region that does not qualify as an actual defect with respect to the contemplated end use of the web;

and wherein the locating mark is applied to identify the position of only the at least one identified region that qualifies as an actual defect with respect to the contemplated end use of the web.

3. (currently amended) The method according to claim 2 wherein processing the digital information describing the identified regions comprises analyzing the extracted identified regions with at least one subsequent algorithm to determine at least one identified region that qualifies as an actual defect with respect to the contemplated end use of the web, wherein the subsequent algorithm is not the same as the initial algorithm.

4. (cancelled)

5. (previously presented) The method according to claim 2 wherein the stored or buffered information is processed after the imaging has been performed on the entire web.

6. (canceled)

7. (original) The method according to claim 1 wherein the locating marks are on or adjacent to the anomalies whose position they identify.

8. (original) The method according to claim 1 wherein the locating marks are spaced in a predetermined way from the anomalies whose position they identify.

9. (currently amended) A system for marking a web of material having at least two anomalies, comprising:

a fiducial marker for applying fiducial marks on a portion of the web, wherein the fiducial marks uniquely identify particular positions on the web;
an inspection module for imaging the portion of the web to provide digital information, processing the digital information with an initial algorithm to identify regions on the web containing the anomalies, and determining positional information localizing the identified regions relative to the fiducial marks;

a fiducial reader for reading and providing localizing information from the fiducial marks;

a web marker for applying locating marks to the web;

a web marker controller for controlling the web marker so as to apply locating marks to the web identifying the position of at least one of the anomalies that constitutes a defect, using the positional information and the localizing information as a guide; and;

wherein the fiducial marker and the inspection module are associated with a first webhandling apparatus that winds the web around a first core, and wherein the fiducial reader, the web marker, and the web marker controller are associated with a second webhandling apparatus that winds the web around a second core.

10. (currently amended) The system according to claim 9 wherein the web marker controller, before providing signals commensurate with a marking of an anomaly, receives input defining the constituents of an anomaly that is a defect with respect to the contemplated end use of the web to determine that at least one of the anomalies is determined to does qualify as an actual defect with respect to a contemplated end use of the web, and at least one of the anomalies is determined to does not qualify as an actual defect with respect to the contemplated end use of the web, and wherein the anomalies to which locating marks are applied by the web marker controller are those determined to qualify as an actual defect with respect to the contemplated end use of the web.

11. (currently amended) The system according to claim 9 wherein the inspection module extracts information defining identified regions from the digital information, and wherein the system further comprises:

a data storage module operative to store the extracted information defining the identified regions on the web containing anomalies, as well as the determined positional information localizing the regions on the web containing anomalies relative to the fiducial marks;

a processor associated with the web marker controller operative to receive information defining the identified regions stored in the data storage module and analyze the extracted information defining the identified regions with at least one subsequent algorithm to determine at least one anomaly that represents an actual defect with respect to a contemplated end use of the web, and at least one anomaly that does not represent an actual defect with respect to the

contemplated end use of the web, wherein the subsequent algorithm is not the same as the initial algorithm.

12. (Original) The system according to claim 10 wherein the inspection module stores or buffers the identified regions for the processor.

13. (Canceled)

14. (Original) The system according to claim 9 wherein the web marker places locating marks on or adjacent to the anomalies whose position they identify.

15. (Original) The system according to claim 9 wherein the web marker places locating marks that are spaced in a predetermined way from the anomalies whose position they identify.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (currently amended) A method of marking a web of material having fiducial marks thereon, comprising:

receiving the web of material in the form of a roll, the web of material having at least two anomalies;

receiving digital information about the location of the at least two anomalies on the roll web of material relative to the fiducial marks, wherein the fiducial marks uniquely identify a position on the web;

after receiving the web of material and the digital information, unwinding the roll; and

applying locating marks to the web identifying the position of at least one of the anomalies that constitutes an actual defect, using the digital information and the fiducial marks as a guide.

23. (previously presented) The method according to claim 22, wherein: the locating marks are applied to the web within 1 mm of the anomalies they identify.

24. (previously presented) The method of claim 22, further comprising processing the digital information with an algorithm to identify at least one anomaly that qualifies as a defect with respect to a contemplated end use of the web, and to identify at least one anomaly that does not qualify as a defect with respect to the contemplated end use of the web, and wherein applying locating marks is done only to the at least one anomaly that represents an actual defect with respect to the contemplated end use of the web.

25. (currently amended) A method comprising:

receiving information describing a web of material having fiducial marks thereon, wherein the fiducial marks uniquely identify a position on the web;

analyzing the information with a first algorithm to identify areas of the web containing anomalies;

digitally storing anomaly information that describes the areas of the web identified by the first algorithm as containing anomalies;

analyzing the anomaly information with a subsequent algorithm to produce defect information, the subsequent algorithm identifying at least one anomaly described by the anomaly information as a defect, and at least one anomaly described by the anomaly information as other-than a defect, the defect information including at least information identifying the location of at

least one defect relative to at least one of the fiducial marks on the web, wherein the first algorithm is not the same as the second algorithm.

26. (previously presented) The method of claim 25, further comprising:
marking the location of the at least one defect on the web.

27. (previously presented) The method of claim 25, further comprising:
producing a web conversion plan using the defect information.

28. (currently amended) A method of marking defects on a web of material having fiducial marks thereon, comprising:

receiving the web of material in the form of a roll, the web of material having a plurality of anomalies;

receiving digital information about the location of the plurality of anomalies on the roll, relative to the fiducial marks, wherein the fiducial marks uniquely identify a position on the web;

receiving digital information describing the plurality of anomalies on the roll;

processing the digital information describing the anomalies to determine that at least one of the plurality of anomalies is an actual defect with respect to the contemplated end use of the web, and one of the plurality of anomalies is not a defect with respect to the contemplated end use of the web;

unwinding the roll; and

applying locating marks to the web identifying the position of the at least one anomaly that qualifies as an actual defect.

29. (currently amended) The method of claim 289, wherein the locating marks are not applied to the at least one anomaly that does not qualify as an actual defect.

30. (currently amended) The method of claim 289, further comprising:

selecting one or more algorithms that identify defects, and wherein processing the digital information comprises applying the selected one or more algorithms to the digital information describing the anomalies.

31. (new) The method of claim 2, wherein receiving input defining the constituents of an anomaly that is a defect step and the processing the digital information describing the identified regions steps are done subsequent to the winding step.